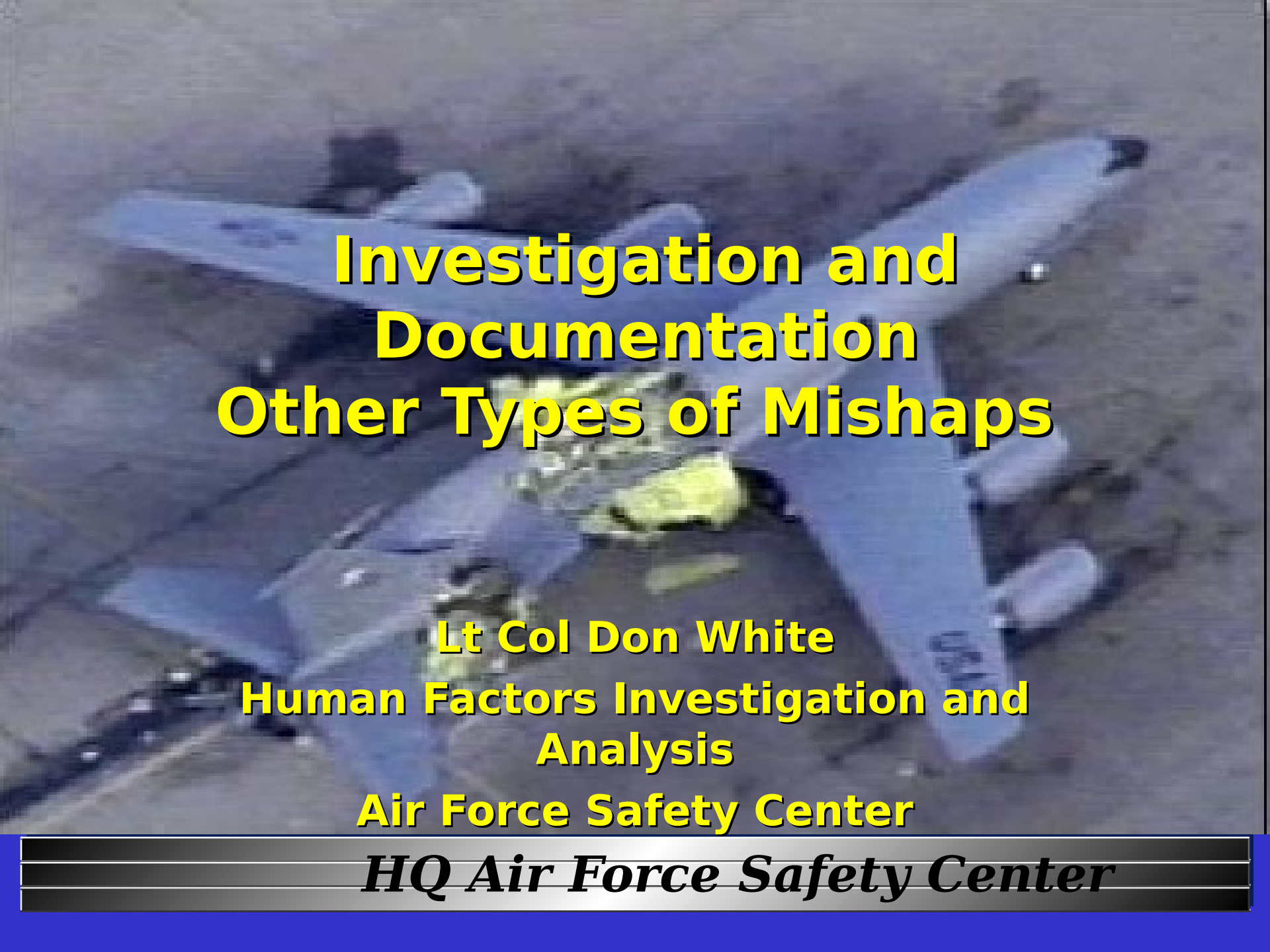

Investigation and Documentation Other Types of Mishaps

Lt Col Don White

Human Factors Investigation and Analysis

Air Force Safety Center

U. S. AIR FORCE

Mishaps Other Than Flight Ground

- **Motor Vehicle**
  - Government Motor Vehicle (GM
  - Government Vehicle Other (GV
  - Private Motor Vehicle (PMV)
- **Ground and Industrial**
  - Combat training
  - Contractor
  - Commercial carrier
  - Sports and Recreation
  - Miscellaneous

"Don't worry Jimmy – they're just actors. And that's not real ketchup."

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Mishaps Other Than Flight Ground

- **Off-duty**
  - Commercial carrier
  - Sports and recreation
  - Miscellaneous
- **Maritime**
- **Fire**

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Mishaps Other Than Flight Missile

- **Mishap associated with self-propelled, unmanned systems designed to deliver ordnance or act as a target**
- **Mishap category determined by algorithm (Chapter 8 table 8.5, AFI 91-204)**
  - Missile
  - Missile, Ground Involvement
  - Aircraft flight, Missile Involvement – flight mishap

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Mishaps Other Than Flight Space

- **Mishaps involving space systems or unique space support equipment**
- **Orbital**
- **Space, Ground and Industrial Involvement**
  - Prior to launch involving unique support equipment that does not leave the ground
- **Ground and Industrial, Space Involvement**
  - Prior to launch involving commonly used equipment

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Mishaps Other Than Flight Explosives and Chemical Agents

- **Mishaps involving ammunition, propellants, pyrotechnics, explosives, warheads, chemical agents**
- **Category determined by algorithm (Table 10.4 AFI 91-204)**
  - Explosives
  - Explosives, Ground Involvement
  - Ground, Explosives Involvement
  - Aircraft Flight, Explosives Involvement
  - Aircraft Ground Operations, Explosives Involvement

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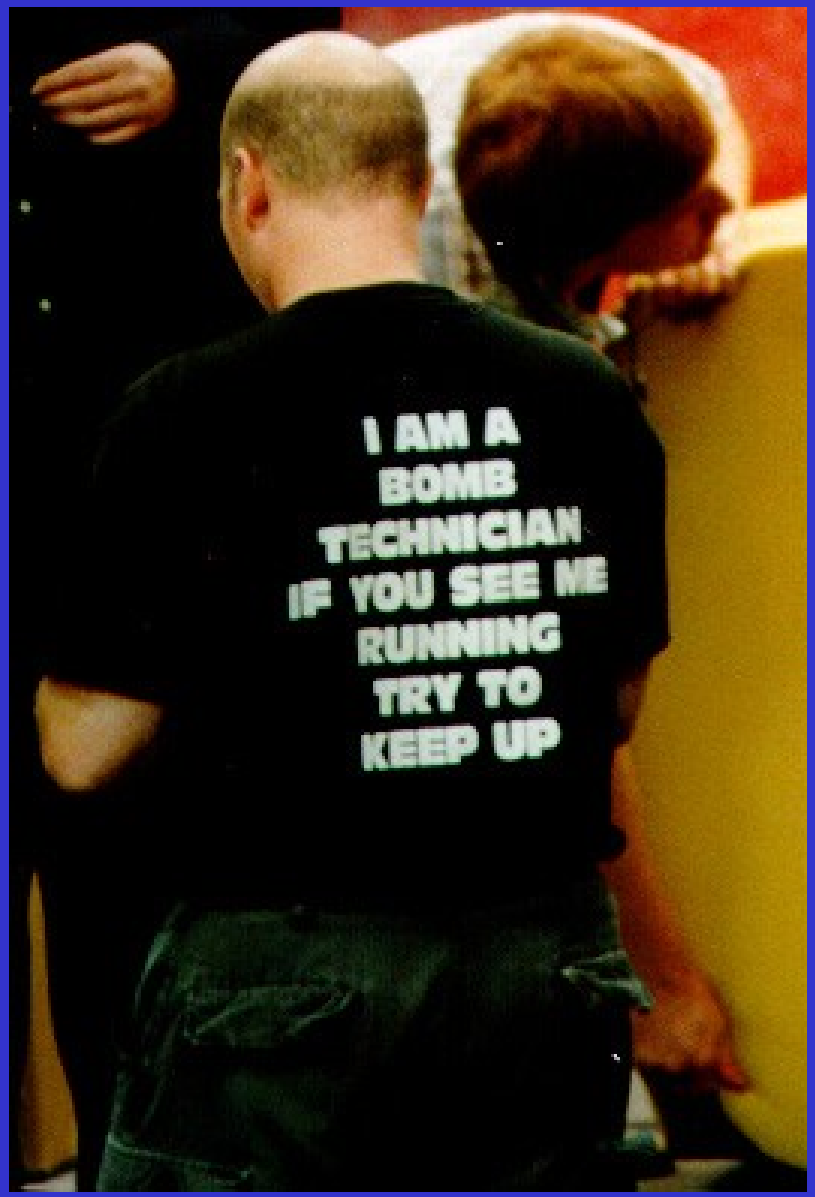

Mishaps Other Than Flight

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- **Nuclear**
  - Mishaps involving nuclear weapon systems, nuclear reactor systems and radiological materials
- **Miscellaneous Air Operations**
  - Mishap resulting in injury or death in a non-DOD aircraft with intent to fly (e.g. Aero Club)
- **Unmanned Aerial Vehicle (UAV)**
  - Mishaps involving damage to UAV without damage to an aircraft

Flight Surgeon Involvement

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- Required primary member for Class A Missile
- Additional primary member for
  - Class A Ground
  - Class A Explosives
  - Class A Nuclear
- Can be asked to participate in any tailored board
- Involvement is rare
- Expect the board to be similar to Class A flight but with much less guidance
- Created tailored “Tab Y” with some limited use of LSR

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"I've got it, too, Omar. . . a strange feeling like we've just been going in circles."

enter

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Flight Surgeon Involvement "The Biggies"

- Class E Physiological Incidents
- AFI 51-503 Legal Boards

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Physiological Incidents Types

Class E Mishap

- DCS (Include 72 hour history)
- Illness causing incapacitation in-flight (+ 72 hr Hx)
- GLOC
- Spatial Disorientation
- Symptoms caused by noxious, toxic, irritating mat.
- Traumatic injuries from mission demands/activities
- Hypoxic hypoxia
- Trapped gas disorders (unless unpressurized)
- Eye damage from laser
- Anything else you feel is significant!

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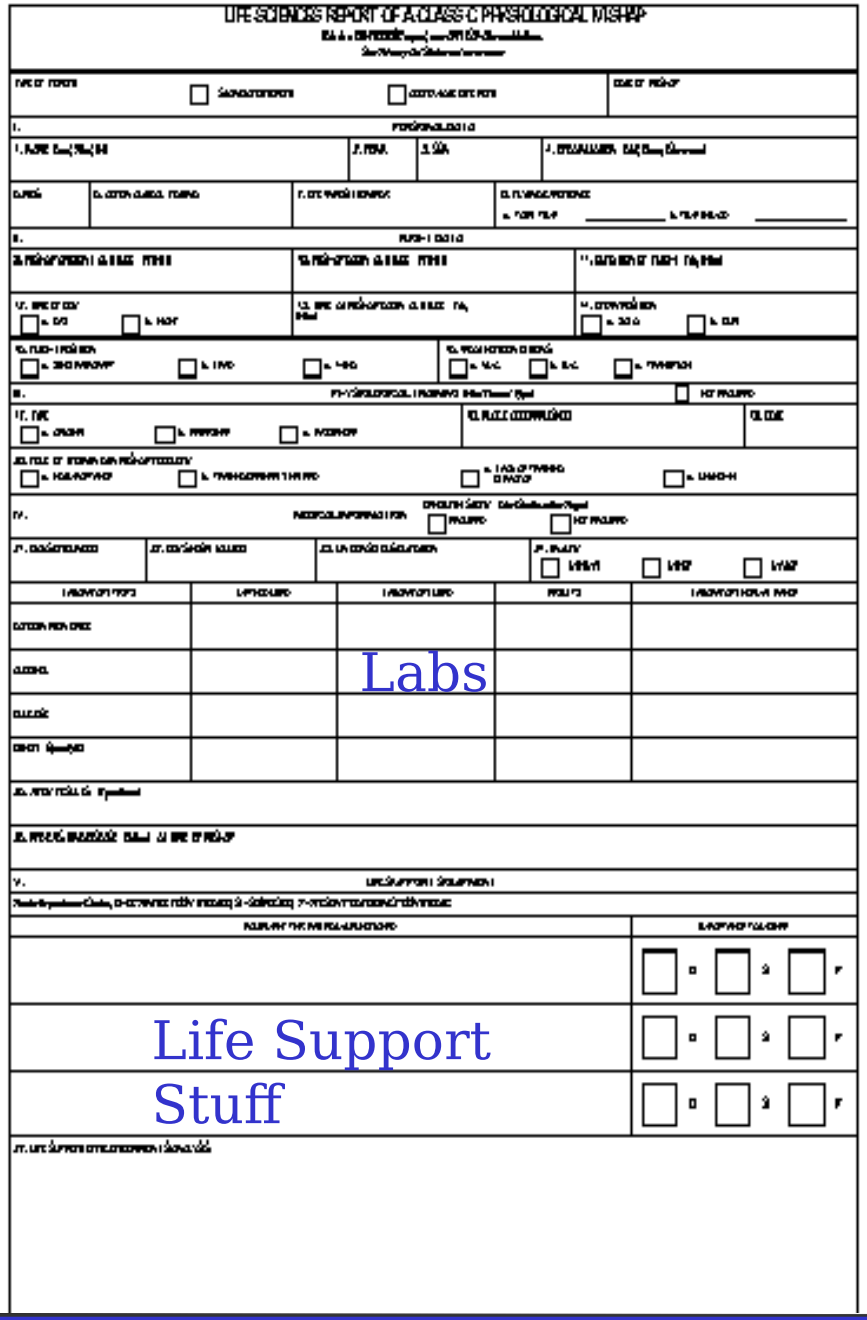
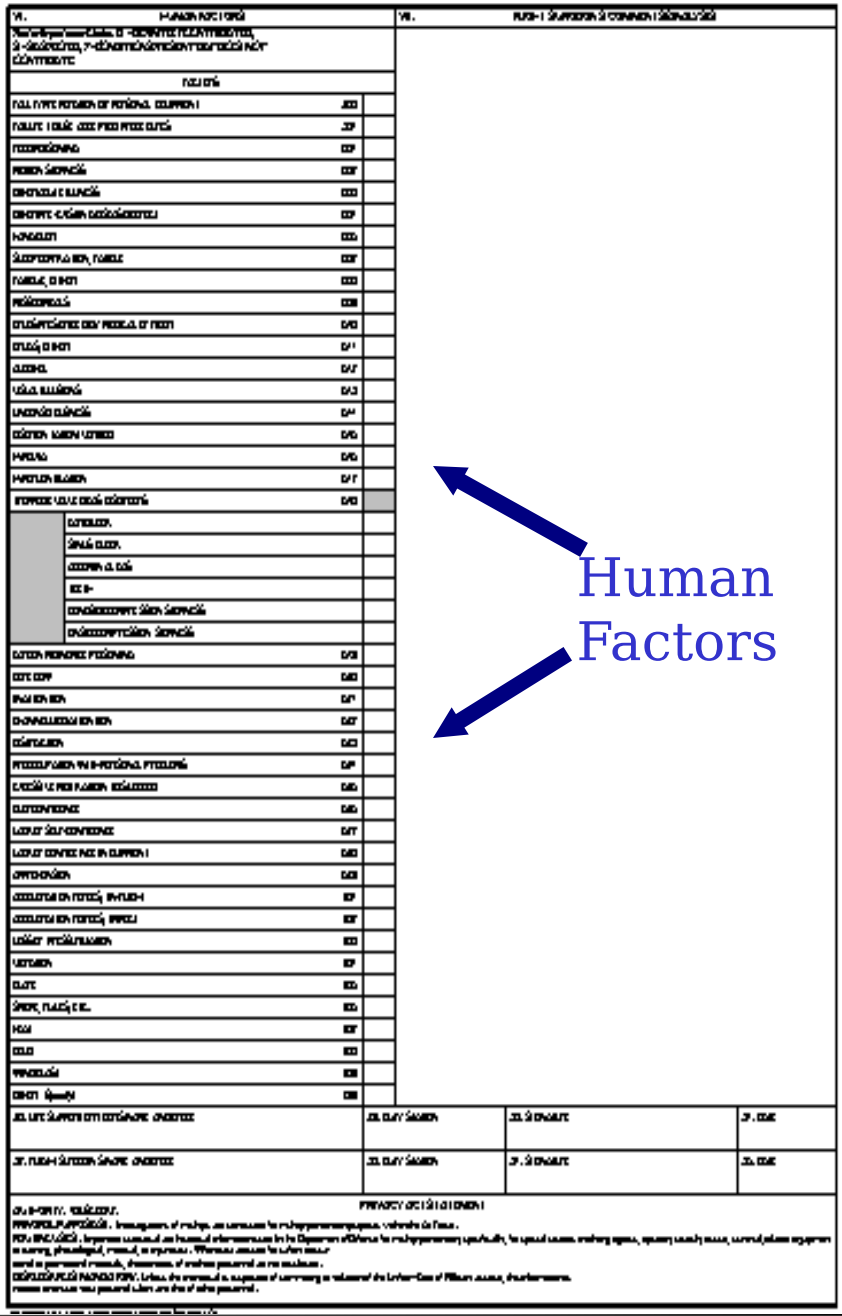
Physiological Incidents Investigation

- **Conducted by flight safety officer and flight surgeon**
- **Medical Investigation**
  - Post incident evaluation
  - TOX testing not required but may be directed
- **Paperwork**
  - AF 711gC
  - Available through the AF publications web site


LIFE SCIENCES REPORT OF A CLASS C PHYSIOLOGICAL MISHAP
Labs
Life Support
Stuff


Human
Factors

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Accident Investigation Board (AIB) Purpose

- To provide a publicly releasable report of the facts and circumstances surrounding an accident

- To gather and preserve evidence for claims, litigation, disciplinary, and administrative actions

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CORRECTION
A RECENT DILBERT STRIP USED THE WORDS "ANT FARM" TO DESCRIBE A HABITAT FOR ANTS.
LAWYERS HAVE INFORMED ME THAT "ANT FARM" IS A TRADEMARK OF "UNCLE MILTON INDUSTRIES, INC." THEY DEMAND A PUBLIC CLARIFICATION.
WHAT SHOULD WE CALL A HABITAT FOR WORTHLESS AND DISGUSTING LITTLE CREATURES?
LAW SCHOOL.

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Accident Investigation Board (AIB) (AFI 51-503)

- All Class A mishaps
- Probable high public interest
- Suspected friendly fire incidents

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Accident Investigation Board (AIB) Flight Surgeon Involvement

- **Appointed as an advisor to the board president**
- **The medical advisor should review**
  - Medical qualifications
  - Postmortem and toxicology results
  - Post accident medical examination records of survivors
  - Autopsy protocols and medical records
  - X-rays and other post-mishap medical tests

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Accident Investigation Board (AIB) Witness Interviewing

- Same principle as SIB but…
- Requires specific introduction delineating the differences from SIB (AFI 51-503)
- Some witnesses must be sworn in under oath
  - "You have the right to remain silent…."

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The AIB Report Contents

- **Executive Summary**
- **Summary of facts**
- **Statement of opinion**
- **Tabs A-BB**
  - Tabs A-S identical to SIB Tabs A-S (They are SIB Tabs A-S)

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The AIB Report Medical Contribution

- **Summary of facts (Medical and Human Factors)**
  - Statement on qualifications of aircrew or missile crew
  - Statement of whether injuries/other medical findings were related to the mishap (review of post-accident examinations)
  - Statement on cause of death (review of autopsy)
  - Statement on toxicology results (review of TOX results)
  - Discussion of psychosocial issues linked to the accident
  - Discussion of crew rest and duty time
  - Discussion of human factors that may have contributed to accident

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The AIB Report
Medical Contribution

- **Tab X**
  - Statements of injury or death – general statement of cause of death or injury, any abnormal laboratory results and any medical factors affecting performance

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The AIB Report Precautions

- Can’t talk to SIB flight surgeon other than to get physical evidence, medical records, autopsy/test results
- Board may take up to 30 days like SIB
- Report is releasable to family and public – be careful about what you write!!

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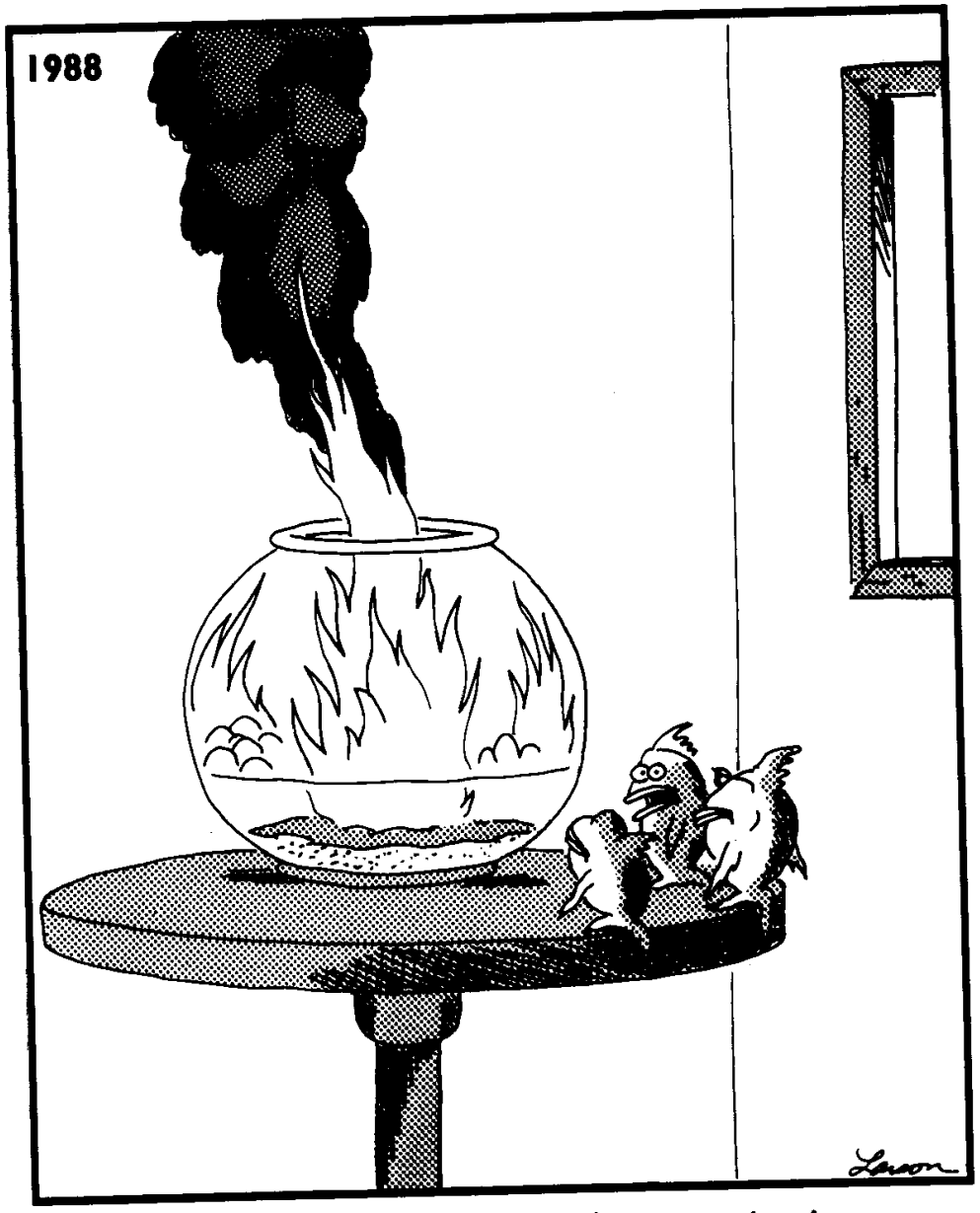

"Well, thank God we all made it out in time. ...
'Course, now we're equally screwed."

nter